

News and Features

Viagra makes flowers stand up straight

Judy Siegel-Itzkovich, Jerusalem

Viagra (sildenafil citrate) is good not only for treating male erectile dysfunction. Israeli and Australian researchers have discovered that small concentrations of the drug dissolved in a vase of water can also double the shelf life of cut flowers, making them stand up straight for as long as a week beyond their natural life span.

They have already tested Viagra on strawberries, legumes, roses, carnations, broccoli, and other perishables. In this latest research, they found that 1 mg of the drug (compared with 50 mg in one pill taken by men with erectile dysfunction) in a solution was enough to prevent two vases of cut flowers from wilting for as much as a week longer than might be expected.

Professor Yaacov Leshem, a plant researcher at Bar-Ilan University in Ramat Gan, Israel, and Professor Ron Wills of the food technology department of the University of Newcastle, Australia, also patented a safe, cheap process for increasing the shelf life of fruit, vegetables, and cut flowers using nitric oxide. The produce and cut flowers were fumigated with the colorless, odorless gas, an environmental pollutant that, in minute

quantities, acts as the body's most important signalling molecule.

The results of the applied research on nitric oxide were first fully reported in late 1998 in *Plant Physiology and Biochemistry* (1998; 36:825-833) and have since been the topic of discussion at international conferences of the food storage and packaging industry. Professor Leshem presented his discovery at the international conference on fresh cut produce in England last September.

An unexpected finding of Professor Leshem's group is that Viagra has a similar effect on plant ripening as it does on men's sexual organs. Viagra increases the vase life of flowers by retarding the breakdown of cyclic guanosine monophosphate (cGMP) (the production of which is mediated by nitric oxide).

Both chemicals could provide the food industry with entirely new, dramatically improved processes for preserving agricultural produce, Professor Leshem said. "Nitric oxide is practically free and plentiful, with no identifiable side effects at the very low concentrations we used," he added. "Right now, Viagra costs much more but does have cer-



Kevin Summers/Tony Stone Images

In need of some Viagra?

tain advantages over nitric oxide; for example, it's easier to use in cut flowers. It is now up to industry to develop the engineering methods for large scale, pretreatment of produce based on our discoveries."

Pediatricians propose plan to insure every American child

Scott Gottlieb, New York

The American Academy of Pediatrics announced a new health insurance proposal that would create a national program in which all children and young people up to the age of 21 are automatically eligible for full, government-funded healthcare coverage. At present, 11 million children are not covered by insurance.

The new program would have uniform

eligibility and benefits, and if enacted, would replace parts of existing programs that provide partial but not complete health insurance coverage, mostly to children born into poor families. The announcement was made at the academy's annual meeting held at the Washington Convention Center in Washington, DC—an event President Clinton attended and at which he offered his own ver-

sion of health insurance for children during a keynote address.

Under the president's proposal, federal agencies would be directed to visit schools and proactively enroll children into existing federal health insurance programs that the president said are largely underused. Congress created a new program that expanded health insurance to children in